Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Establishment of Public Service Radio	)	
Pool in the Private Mobile	)	**RM** _____
Frequencies Below 800 MHz	)	
	)	

To: The Commission

PETITION FOR RULEMAKING

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Summary

The Critical Infrastructure Industries -- electric, gas and water utilities, petroleum and natural gas pipelines and railroads – urge the FCC to establish a new radio service pool in the private land mobile bands below 800 MHz. This new pool, the Public Service Pool, would protect vital public safety-related services from interference and encroachment by new industrial and commercial communications systems. Such protection is absolutely critical in the current environment of spectrum scarcity and congestion

The establishment of the new radio service pool also reflects the intent of Congress to protect the communications of important public safety and critical infrastructure industries. Through the Balanced Budget Act of 1997, Congress sent a clear message to the FCC to protect the availability of power, petroleum and railroad communications by exempting these services from auctions as "public safety radio services." These industries are unique from other industrial users. They rely on extensive private communications systems for the safe and reliable operation and maintenance of the nation's critical infrastructure. Moreover, their unique operating territories and requirements for reliability and security prevent these industries from simply taking service from commercial providers.

The Critical Infrastructure Industries' proposal to establish a new Public Service Pool is an equitable and efficient solution to the problems caused by the two-pool consolidation implemented in the FCC's "refarming" proceeding. While not affecting the existing Public Safety Pool, it would group together those industries whose need for reliable communications has resulted in similar concerns regarding the use and coordination of spectrum. In addition, it would retain the existing frequency coordination protection afforded to the Power, Petroleum and Railroad Radio Services for the channels previously identified for exclusive use by these services. Finally, it would redistribute to the new Public Service Pool those shared channels that are most heavily used by Public Service Pool eligibles.

To ensure that these vital systems are protected from interference caused by an influx of new industrial licensees, the Critical Infrastructure Industries recommend that the FCC consider only those applications for use of channels identified for reallocation to the Public Service Pool that are on file as of the date of this petition. In addition, they recommend that the FCC enact new protections for the existing systems of Critical Infrastructure Industries by adopting protected service contours for these systems.

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Pursuant to Section 1.401 of the Federal Communications Commission's (FCC) Rules, UTC, The Telecommunications Association (UTC), the Association of American Railroads (AAR) and the American Petroleum Institute (API) (jointly referred to as Critical Infrastructure Industries) hereby submit this *Petition for Rulemaking* regarding the consolidation of the private radio pools below 800 MHz. The Critical Infrastructure Industries, representing electric, gas and water utilities, petroleum and natural gas pipeline companies and railroads, urge the FCC to provide necessary protections for these important services and to effectuate the intent of Congress as evidenced in the Balanced Budget Act of 1997. Specifically, the Critical Infrastructure Industries urge the FCC to establish a new Public Service radio pool in the bands below 800 MHz.

I. Introduction and Background

A. The Critical Infrastructure Industries

As representatives of the Critical Infrastructure Industries, UTC, API and AAR are pleased to have this opportunity to submit this *Petition* for consideration by the FCC.

1. UTC

UTC is the national representative on communications matters for the nation's electric, gas, water and steam utilities, and natural gas pipelines. UTC's approximately 1,200 members range in size from large combination electric-gas-water utilities which serve millions of customers, to smaller, rural electric cooperatives and water districts which serve only a few thousand customers each. Serving on UTC's Board of Directors are representatives from its affiliated trade associations, including:

- American Gas Association
- American Public Power Association
- American Water Works Association
- Edison Electric Institute
- Interstate Natural Gas Association of America
- National Rural Electric Cooperative Association

2. API

API is a national trade association representing approximately 350 companies involved in all phases of the petroleum and natural gas industries, including exploration, production, refining, marketing, and transportation of petroleum, petroleum products and natural gas. Among its many activities, API acts on behalf of its members as spokesperson before federal and state regulatory agencies. The API Telecommunications

Committee is one of the standing committees of the organization's Information Systems Committee. The Telecommunications Committee evaluates and develops responses to state and Federal proposals affecting telecommunications facilities used in the petroleum and natural gas industries.

3. AAR

The Association of American Railroads is a voluntary, non-profit organization composed of Class I and other railroad companies operating in the United States, Canada and Mexico. These railroad companies generate 97 percent of the total operating revenues of all railroads in the United States. The AAR represents its member railroads in connection with Federal regulatory matters of common concern to the industry as a whole, including matters pertaining to the regulation of communications. In addition, AAR functions as the frequency coordinator with respect to the operation of land mobile and other radio-based services. The railroads use land mobile radio frequencies for critical safety and operational functions to support nationwide railroad operations, to control train movements and to monitor safety-related conditions of track and equipment throughout the railroad system.

B. Procedural History

In March 1997, the FCC released its S*econd Report and Order* (*SR&O*) in PR Docket No. 92-235, which consolidated the twenty (20) existing private radio service

pools operating below 800 MHz into two broad pools: (1) Public Safety; and (2) Industrial/Business.[1]

NEW POOL	OLD RADIO SERVICES
Public Safety	Police
	Fire
	Emergency Medical
	Special Emergency
	Local Government
	Highway Maintenance
	Forestry-Conservation
Industrial/Business	Power
	Petroleum
	Railroad
	Film and Video Production
	Relay Press
	Special Industrial
	Business
	Manufacturers
	Telephone Maintenance
	Motor Carrier
	Taxicab
	Automobile Emergency

The *SR&O* attempts to balance two separate and distinct interests -- the need to address public safety considerations and the desire to introduce greater efficiency in the Private Land Mobile Radio (PLMR) bands. A small number of broad pools, it was reasoned, would ensure the most efficient distribution of channels, permit licensees to better use innovative and efficient technology and reduce administrative burdens.

The FCC provides two mechanisms to "guarantee" that this consolidation does not jeopardize public safety.[2] First, the FCC's establishment of a separate and distinct Public

[1] *Second Report and Order*, PR Docket No. 92-235, 12 FCC Rcd 14307 at ¶11 (1997).

Safety Pool isolates the channels used by traditional public safety agencies from other services. Public safety agencies are therefore protected from potential interference and operational problems posed by new commercial licensees seeking to operate on Public Safety Pool channels. Prohibiting non-Public Safety eligibles from gaining access to these channels also protects the availability of Public Safety Pool channels.

The second mechanism that addresses public safety considerations is the retention of frequency coordination protections for certain services in the new Industrial/Business Pool. Three PLMR services in this pool -- railroad, power and petroleum -- were acknowledged as "critical, public safety related services."[3]

> *We recognize that within the Industrial/Business Pool, some types of radio users employ radio not just for day-to-day business needs but also to respond to emergencies that could be extremely dangerous to the general public. Often times these communications systems are employed to meet Federal regulations... In this regard, there is broad support in the comments to protect operations in several radio services (Railroad, Power, and Petroleum) where radio is used as a critical tool for responding to emergencies that could impact hundreds or even thousands of people. Although the primary function of these organizations is not necessarily to provide safety services, the nature of their day-to-day operations provides little or no margin for error and in emergencies they can take on an almost quasi-public safety function. Any failure in their ability to communicate by radio could have severe consequences on the public welfare... Because interruptions in the ability of these entities to communicate could detrimentally affect the public welfare, we believe that it is important to maintain the integrity of communications on radio spectrum used for railroad, power, and petroleum operations.*[4]

To protect these critical services from interference from others in the pool, the FCC requires any entity that applies for channels allocated exclusively to these services

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[2] *Id.*

[3] *SR&O* at ¶2.

to obtain coordination from the certified frequency coordinator for the respective service. As the FCC has acknowledged, there is a need to maintain the "integrity of spectrum used for such public safety purposes" -- using coordinators who are knowledgeable with these services' special communications needs is the best way to protect these systems.[5]

In August 1997, the Balanced Budget Act of 1997 (97 Budget Act) was signed into law.[6] This law expands the FCC's authority to use competitive bidding to license radio systems, requiring the FCC to auction all mutually exclusive applications for initial licenses. However, the law specifically recognizes that certain radio services must be protected from auctions, including "public safety radio services." This term is defined to include "private internal radio services used by State and local governments and non-government entities and including emergency road services provided by not-for-profit organizations, that – (1) are used to protect the safety of life, health, or property; and (ii) are not made commercially available to the public."[7] Congress further clarified this definition in the report that accompanied this legislation.

> *[T]he exemption from competitive bidding authority for "public safety radio services" includes "private internal radio services" used by* ***utilities, railroads,*** *metropolitan transit systems,* ***pipelines,*** *private ambulances, and volunteer fire departments. Though private in nature, the services offered by these entities protect the safety of life, health, or property and are not made commercially available to the public.*[8]

The 97 Budget Act, and in particular the "public safety radio services" exemption, clearly demonstrate Congress' intention to enact new protections for the Critical

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[4] *SR&O* at ¶41.
[5] *Id.*
[6] P.L. 105-33 (enacted August 5, 1997).
[7] P.L. 105-33, Section 3002(a)(2) amending Section 309(j)(2) of the Communications Act.

Infrastructure Industries. In addition, the Act changes the regulatory landscape by permitting the FCC to introduce auctions for mutually exclusive applications in private bands. In light of these changes, the Critical Infrastructure Industries urge the FCC to modify its consolidation rules to afford additional protections to licensees in the railroad, power and petroleum services.

II. FCC Should Establish a New "Public Service Pool" for the PLMR Bands Below 800 MHz

The Critical Infrastructure Industries recommend that the FCC create a new pool of PLMR channels, separate from the Industrial/Business and Public Safety Pools. By establishing this new pool, the FCC would safeguard channels used to protect the nation's critical infrastructure. The pool proposal of the Critical Infrastructure Industries does not affect the established Public Safety Pool, nor does it permit Public Service eligibles to gain access to that pool. Instead, the proposal establishes new protections for Public Service entities within the context of the refarming proceeding based on new congressional guidance. Proposed amendments to Part 90 of the FCC's Rules to effectuate the new Public Service Pool are attached as Appendix A to this *Petition.*

First, the establishment of a new and distinct pool will protect Public Service frequencies from encroachment from non-essential "industrial" services.[9] As the FCC has

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[8] H. Rpt. 105-49, *Congressional Record,* p. H6173 (June 29, 1997) (emphasis added).

[9] The Critical Infrastructure Industries recognize that virtually all industries view their roles in the US economy or way of life as "essential." For example, agribusiness interests point to the importance of food production to our society and taxicab operators point to the important role that they play in transportation; other industries make similar claims. Unlike utilities, pipelines and railroads, these industries cannot demonstrate that their communications requirements are essential to the protection of the nation's core infrastructure and public safety, or that public safety considerations require them to have immediate,

correctly noted, utilities, pipelines and railroads, are "critical, public safety related services." Unlike other industrial users, Public Service entities' use of radio systems is directly related to the protection of the essential public services. Radio systems are used to protect the electric grid, safeguard the nation's water supplies, ensure the safe and reliable transportation of gas and petroleum through underground pipelines and control the nation's railways. The disruption of any of these services would have an immediate and widespread impact on the nation's critical infrastructure.[10] Protecting the availability of spectrum for Public Service entities is essential to protecting these important services.

Second, the FCC's existing frequency coordination provisions would add another layer of protection for these important services. Frequencies of individual Public Service industries -- power, petroleum and railroad -- should continue to be coordinated solely by the designated frequency advisory committees for that industry. As noted above, using coordinators who are knowledgeable with these services' special communication needs is the best way to protect these systems. Licensees in the consolidated Industrial/Business Pool do not need this coordination protection because their communications do not reach the same level of criticality as Public Service Pool eligibles.

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continuous access to spectrum. For utilities, pipelines and railroads, immediate and continuous access to communications is a necessity; the absence of communications, even for a short period of time, poses serious threats to utility, pipeline and railroad operations. The same cannot be said of other industries.

[10] The President's Commission on Critical Infrastructure Protection (PCCIP) recognized the need to protect the nation's critical infrastructure, including electric power systems, water supply systems, oil and gas transportation and storage systems and transportation. As the PCCIP noted: "Our security, economy, way of life, and perhaps even survival, are now dependent on the interrelated trio of electrical energy, communications, and computers."

A. The FCC Must Act Now To Protect These Services

The threat to Critical Infrastructure Industry communications systems is a reality under the current two-pool mechanism. New systems are being licensed near utility and pipeline operations, and these new systems are already causing interference to the incumbent operations.

UTC was made aware of a recent example of interference to an important communications system caused by the licensing of a non-public service entity near a gas utility's existing system. The utility, Public Service Electric and Gas (PSE&G), operates a radio dispatch system to maintain communications with its emergency and maintenance crews. Recently, another coordinator coordinated a new private carrier communications system on a frequency co-channel to the existing PSE&G radio system, about twenty-five (25) miles distant and at significantly greater power than PSE&G's system. The resulting interference prevented PSE&G from being able to use its radio system for a full week while the utility and UTC sought to identify the interference source.[11]

PSE&G has also reported another serious instance of interference caused by a new licensee. PSE&G is currently receiving severe interference on a channel that is used by the gas crews operating out of PSE&G's Summit, New Jersey office. During April and May, there were sixteen (16) instances where crews did not receive dispatch orders

[11] The Critical Infrastructure Industries understand that within one hour of receiving a letter complaining of the interference from PSE&G, the FCC contacted the carrier and ordered the carrier to discontinue operation on the frequency. While the FCC should be commended for its fast response to this problem, the Critical Infrastructure Industries cannot simply wait for new and more dangerous instances of interference to occur. A pro-active FCC solution is necessary.

relating to public safety orders for the immediate disconnection of gas service (e.g., to scenes of fires). The company has a general requirement for a gas crew to respond to a report of a leak within sixty (60) minutes of the customer call, and the company is required to respond immediately to public safety calls for assistance. The interference has prevented PSE&G from fulfilling its public service obligations and has directly threatened the safety of the public and of other emergency response workers, including police and fire personnel.

There are other examples as well. For use in a trunked private carrier radio system, an Industrial/Business Pool coordinator recently recommended frequencies used by New York State Electric and Gas Company (NYSEG) to communicate with their crews working to restore power in storms, and other emergency situations, disasters, and mutual aid to other power systems. On behalf of NYSEG, UTC opposed the recommendation, noting the very substantial potential for interference between a utility and a commercial service provider that has an economic incentive to load its system to the point of saturation in a trunked radio system which may not adequately detect co-channel usage.[12] UTC also expressed its concern that the coordinator was making frequency recommendations without due regard for the compatibility of users in a given area to efficiently and safely share a channel.

[12] UTC Letter to Donald Vasek of the Personal Communications Industry Association, dated May 15, 1998. UTC understands that the FCC is considering deferring action on these applications to provide time for the parties to resolve this matter.

Unfortunately, these examples are simply the tip of the iceberg. The potential for disaster will grow as more and more systems are coordinated in the bands below 800 MHz. What will happen when an emergency crew is suddenly cut-off from a utility or pipeline dispatch center during an emergency due to interference from a new licensee turning on its system? Under the existing pool consolidation rules, this scenario is all too possible.

Additionally, the Critical Infrastructure Industries are facing a growing shortage of spectrum to meet their important internal communications requirements. Already, there has been an increase in the number of speculative applications for radio licensing in the PLMR bands below 512 MHz. The number of channels available to meet the evolving needs of utilities, pipelines and railroads will continue to shrink as the FCC's refarming rules are implemented and new industrial and business users begin "gobbling up" new offset channels. The introduction of trunking into the bands below 512 MHz will also speed up the depletion of available channels, as new users try to aggregate channels to deploy these systems.

In order to protect vital utility, petroleum and railroad operations, the FCC must act now by establishing a new Public Service Pool and protecting the channels in this pool from encroachment by applicants from the Industrial/Business Pool. A new Public Service Pool is required in light of the clear and imminent danger that the established consolidation plan poses to vital utility, petroleum and railroad operations and to

effectuate the intent of Congress, as expressed in the 97 Budget Act, to protect these services.[13]

B. The FCC Must Act To Implement the Intent of Congress to Protect "Public Safety Radio Services"

The 97 Budget Act clearly demonstrates the intent of Congress to promote the continued development and availability of "public safety radio services." These services, along with traditional public safety services, were determined to require special protection from spectrum auctions. Indeed, the primary reason that Congress mandated this protection was to ensure continued access to spectrum for these important services.

Congress also recognized that these services, unlike many other types of licensees, do not fit within the auction paradigm. First, their unique operating territories do not coincide with geographically defined licenses, making it difficult for these entities to successfully participate in auctions. For instance, many railroads and pipelines have service territories running across numerous state lines. These entities would have to participate and prevail at auctions for multiple licenses just to be able to operate private communications systems throughout their operating territory. Even if they could accomplish this feat, the licenses they win would likely include areas in which they have no need to offer service. There is simply no way for geographic "cookie-cutter" licensing to apply to these entities.[14]

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[13] The Critical Infrastructure Industries also urge the FCC to undertake a comprehensive rulemaking to determine what other safeguards may be necessary to protect and promote Public Service operations. Such safeguards should include, at a minimum, protections for incumbent Public Service systems and sufficient spectrum allocations to meet the evolving needs of the Critical Infrastructure Industries.

[14] The ability to disaggregate and partition licenses does not offer a solution to this problem. The important internal spectrum needs of the Critical Infrastructure Industries cannot be placed at risk by speculation that they can "buy" the necessary spectrum from a license winner. Nor it is reasonable to

Second, due to their operational requirements, taking service or leasing spectrum from auction winners may be difficult, if not impossible, for Public Service entities. Public Service licensees require higher levels of reliability and security than industrial users. In the case of electric utilities, for example, the interconnected nature of the national electric grid makes each communications link -- whichever utility operates it -- critical to the operation of the entire grid. Reliability of the communications network used for these purposes is essential to the continued safe operation of this grid.[15] As additional suppliers and users of electric power are brought on line through deregulation in this industry, the communications networks that tie the grid together will become even more critical. In addition, mobile radio is used by utilities to dispatch crews and materials, and to coordinate service restoration during and following emergency situations; *e.g.,* downed power lines or damaged gas mains. Mobile radio is also used for nuclear plant security and emergency response capabilities and hydraulic dam flood warning sirens and alarms.

Drinking water companies rely on radio systems to protect the nation's water supplies. Water companies use SCADA systems to prevent the loss of system integrity

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expect a Critical Infrastructure Industry to attempt to purchase all licenses covering its operating territory and to subsequently partition or disaggregate the vast amount of spectrum it does not need. This "solution" would require an enormous financial commitment upfront simply for the chance to compete for the licenses, while there is little evidence of a viable secondary market for the excess spectrum.

[15] Recently, the Federal Energy Regulatory Commission (FERC) adopted regulations requiring utilities to open their transmission systems to access by other wholesale power providers. State legislatures and regulators in many states are also looking at ways to open utility distribution systems to access by wholesale and retail competitive service providers. These regulatory actions will require effective operational controls to maintain system reliability.

from sources such as pump failures and aging infrastructure. Moreover, water companies rely on radio systems to: (1) increase source water protection by monitoring water quality though use of remote data acquisition systems; (2) improve remote treatment management systems; (3) increase distribution system operational control; and (4) enhance system efficiency. Water company radio systems are essential to protect the public from both acute pathogenic and chemical risks and to reduce chronic lifetime health risks.

Natural gas pipeline and petroleum companies use mobile radio systems for vital internal communications to protect and enhance all aspects of their operations. For instance, these private telecommunications facilities are used to support the search for and production of oil and natural gas. Such systems are also utilized to ensure the safe pipeline transmission of natural gas, crude oil and refined petroleum products and for the processing and refining of these energy sources, as well as for their ultimate delivery to industrial, commercial and residential customers. These systems are essential in the oil and gas industries to provide communications in normal areas of operation and in particularly challenging work environments, such as offshore drilling rigs and production platforms, storage tank farms, below-ground facilities, refineries and areas with difficult terrain.

Reliable two-way communications protect oil and natural gas company personnel as they perform daily tasks that need to be coordinated around production, transportation

and processing systems with working pressures between 500 lbs./square inch to over 18,000 lbs./square inch. Malfunctions in any of these systems could result in catastrophic loss of life, severe property loss, extensive environmental damage and a harsh impact on any affected communities. Depending on the extent of the malfunction, a widespread impact on the country's energy availability could be encountered. In short, these telecommunications facilities are critical to the provision of our nation's energy sources.

The mobile communications networks operated by the railroads are vital to the safe operation of the rail system. The size and massive weight of rail equipment as well as high train speeds make train operations an extremely powerful and destructive force. This potential is magnified by the long stopping distances inherent in the operation of heavy rolling stock using steel wheels on steel rail. For example, a fully loaded freight train can take over a mile to bring to a stop. In addition, trains are limited to the right-of-way and, unlike trucks and automobiles, cannot be steered to avoid hazards or obstacles. The combination of these factors means that train operators cannot rely on sight alone for accident avoidance. Advance radio warning of hazards is critical, as is the ability of dispatchers to communicate with train operators via radio regarding train movements. For example, dispatchers use mobile radio to relay track warrants to train operators authorizing passage along a particular right-of-way. or stop orders to halt movement to allow passage of another train along the track, as well as to receive and relay requests from the train and maintenance crews for emergency assistance.

Mobile radio is also used by railroads to allow train-to-train communications between train operators regarding train movements, the state of the track, and hazards or obstacles along the right-of-way. If such messages are blocked or obscured due to interference, disastrous results can occur, especially given the fact that trains often transport hazardous materials through densely populated urban areas. Because of all these factors and the potential dangers inherent in rail transportation, the use of mobile radio for safety applications is integral to the minute-to-minute operations of railroads.

As regulated public service entities, these industries are under specific public safety obligations that compel them to operate internal communications networks. For example:

- Under the Pipeline Safety Act, emergency response plans for gas pipelines must include reliable communications with fire, police and other public safety officials. Internal communications systems are essential to satisfying this requirement.
- The Federal Emergency Management Agency (FEMA) requires reliable primary and backup means of communications between a nuclear facility and the utility's near-site emergency operations facilities, state and local emergency operations centers, radiological monitoring teams and the Nuclear Regulatory Commission. Reliability of these communications systems must be demonstrated under emergency conditions that would overwhelm public or third party systems.
- The North American Electric Reliability Council (NERC) standards also require "reliable and secure telecommunications networks" and the use of exclusive communications channels between the systems and control centers of adjacent electric systems. NERC standards are mandatory for most, if not all, electric utilities.
- The Rail Safety Enforcement and Review Act of 1992 requires the installation of two-way end-of-train devices allowing coordination of movement between the locomotive and the rear of the train.

- The Federal Railroad Safety Act of 1970, as amended, requires the Secretary of Transportation to prescribe regulations and issue orders regarding rail safety.

The unique operational needs of utilities, pipelines and railroads generally cannot be met by commercial systems. Commercial providers cannot cost-justify constructing systems that meet the heightened reliability and security needs of Public Service entities. Public Service entities therefore must construct and operate their own internal communications systems, based on their obligations to provide reliable service to the public. Establishing a separate pool for these types of entities to protect these entities' ability to operate reliable communications systems is necessary.

C. The FCC Must Act to Avoid Future Complications in PLMR Bands Below 800 MHz

Introducing a new pool for the non-auctionable services in the PLMR bands will also avoid complications that may arise from the introduction of market-based licensing mechanisms in these bands. In the FCC's pending *Further Notice of Proposed Rulemaking* in its "refarming" docket, the FCC proposed certain market-based incentives, including exclusivity and competitive bidding, to encourage efficiency in the PLMR bands.[16] While the Critical Infrastructure Industries generally do not support the introduction of auctions in these bands, they acknowledge that, even under prior law that limited auctions to subscriber-based licenses, the FCC has introduced auctions in many

[16] *Report and Order and Further Notice of Proposed Rulemaking* in PR Docket No. 92-235, 10 FCC Rcd 10076, 10126-41(1995).

bands previously designated as private. For example, auctions have been proposed or introduced in:

- 220-222 MHz band;
- 800 MHz SMR and General Category band;
- 900 MHz SMR band; and
- 932/941 MHz MAS band.

The Critical Infrastructure Industries anticipate that, under the expanded auctioning authority of the 97 Budget Act, the FCC will continue to aggressively pursue auctions in other PLMR bands, potentially including the Industrial/Business Pool.[17]

Complications arise, however, if the FCC seeks to introduce auctions in bands that are designated for use by non-auctionable services (i.e., those services specifically exempted from auctions in the 97 Budget Act). For example, how would the FCC resolve mutually exclusive applications for frequencies when one or more of the applicants is a non-auctionable "public safety radio service"? How could the FCC avoid frustrating the clear intent of Congress to protect these important industries?

D. The New Pool Would Not Affect the Established "Public Safety Pool"

The Critical Infrastructure Industries' proposal to establish a new pool separate from the Industrial/Business Pool does not in any way affect the established Public Safety Pool. Under the Critical Infrastructure Industries' approach, the new pool would not affect eligibility to the Public Safety Pool, nor would it permit Public Service Pool

[17] See, e.g., *Public Notice*, DA 98-808, released April 28, 1998, in which the FCC solicited comment on how auctions could be used for non-SMR channels at 800 MHz.

licensees to have access to that pool. The FCC's established rules prohibiting routine intercategory sharing between the Public Safety and Industrial/Business Pools would remain in effect and would be extended to the Public Service pool as well.[18]

III. Structure of the New Pool

A. Eligibility Should Include "Public Safety Radio Service" Entities Not Included in the Public Safety Pool

Eligibility for the new Public Service Pool should include power, petroleum and railroad service eligibles and any other entities that fall within the 97 Budget Act's definition of "public safety radio services" and which are not already protected in the Public Safety Pool. Eligibility should therefore be limited to the Critical Infrastructure Industries, whose systems are used to protect the safety of life, health and property and are not made commercially available to the public.

Public Service Pool	Power (old § 90.63)
	Petroleum (old § 90.65)
	Railroad (old § 90.91)

The above list is not intended to be exclusive, and the Critical Infrastructure Industries recognize that there may be other services which meet the definition of "public safety radio services" and which are not already included in the Public Safety Pool. However, the Critical Infrastructure Industries strongly recommend that the FCC closely

[18] Intercategory sharing of channels should, of course, be distinguished from the development of shared, not-for-profit radio systems operated by Public Safety and Public Service eligibles. See, e.g., Seminole County, Florida, , DA 96-494, 11 FCC Rcd 4105 (WTB 1996); Texas Utilities Services, Inc., DA 97-1404, released July 3, 1997; East River Electric Power Cooperative, DA 97-1910, released September 3, 1997; State of South Carolina and SCANA Communications, Inc., DA 97-2120, released September 30, 1997; Public Utility District No. 1 of Snohomish County, DA 97-2190, released October 10, 1997.

examine eligibility claims for this new pool. It is not sufficient that an industry be able to demonstrate that its radio communications are somehow related to safety. There is no doubt that radio communications are a valuable tool for all businesses and can result in increased productivity and enhanced worker safety. In order to be eligible for this new pool, however, an industry must be able to demonstrate that its use of radio communications is sufficiently related to public safety as to fall within the "public safety radio services" exemption.

B. Existing Frequency Coordination Protections Must Be Maintained

The establishment of a new Public Service Pool is intended to provide additional protection for the Critical Infrastructure Industries, not to eliminate existing protections. Therefore, the Critical Infrastructure Industries believe it is essential that the frequency coordination protections adopted by the FCC in the *SR&O* be maintained.

In the *SR&O*, the FCC correctly acknowledged the important role that experienced frequency coordinators play in protecting operations in the railroad, power and petroleum services. Noting the importance of maintaining the integrity of communications for railroad, power and petroleum, the FCC found that using coordinators that are knowledgeable of these services' special communications needs is the "best way to protect these operations, which involve safety-related communications, and outweighs any potential benefits that may be gained through a competitive

coordination process."[19] The Critical Infrastructure Industries agree, and recommend that this protection be maintained in the new Public Service Pool.

C. Treatment of Shared Frequencies

The Critical Infrastructure Industries recognize that, if a new pool is established, those channels currently allocated to the Industrial/Business Pool will need to be redistributed among the Industrial/ Business Pool and the new Public Service Pool. The new Public Service Pool should consist of:

1) all channels formerly allocated exclusively to the Power, Petroleum and Railroad Radio Services; and

2) an equitable portion of the channels formerly shared by these services with one or more of the other services in the Industrial/Business Pool.[20]

Apportioning the "shared" channels among the two pools is by no means an easy task. However, the Critical Infrastructure Industries have developed an equitable method for redistributing these channels. First, the Critical Infrastructure Industries examined all channels that were previously shared between the power, petroleum or railroad services and other radio services.[21] Next, by comparing the number of call signs of power, petroleum and railroad licensees to the total number of call signs licensed on these channels, the Critical Infrastructure Industries were able to determine the percentage of the total channel usage by the power, petroleum and railroad licensees for each PLMR

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[19] *SR&O* at ¶42.

[20] For example, prior to pool consolidation, the Power and Petroleum Radio Services shared a number of channels with the Forest Products Radio Service. Under the Critical Infrastructure Industries' proposal, an equitable portion of these channels would be reallocated to the new Public Service Pool, with the remaining channels being retained by the Industrial/Business Pool.